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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,020	10/04/2000	Kiichiro Takahashi	1272.C0439	6101

5514 7590 03/30/2007  
FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER
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BRINICH, STEPHEN M

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/678,020	<b>Applicant(s)</b> TAKAHASHI ET AL.	
	<b>Examiner</b> Stephen M. Brinich	<b>Art Unit</b> 2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 6, 13-15 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 7-12, 16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 5, 7-12, 16, & 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Helterline et al.

Re claims 1 & 12, Helterline et al discloses (Abstract; column 4, line 45 - column 5, line 32) an image processing and printing system in which a plurality of ink dot size correction data (contents of look-up table 52) are derived from a judgment of previously determined printing conditions (actual line width of a printout compared to the previously determined desired line width of a printout). These data are then retained and used to perform dot size correction corresponding the result of this judgment, thereby determining which printing condition value should be used in the printout (i.e. calibrating the printer).

Further re claims 1 & 12, Helterline et al discloses (column 2, lines 14-15; column 7, lines 30-34) that this regulation of dot size serves to regulate the density of a printout; thus, ink dot size correction data functions as density correction data.

Printing is thus performed in accordance with these printing conditions.

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Re claims 5 & 16, the printing calibration regulates the volume of a generated ink drop (column 4, lines 55-63), which inherently determines the dot size generated by an ink jet printer. This determination is performed in accordance with printing conditions (as described above re claims 1 & 12) that are determined in accordance with image data (the line width actually produced and the ideal line width desired).

Re claims 7-8 & 18-19, Helterline et al discloses a plurality of print elements (column 5, lines 33-47), each of which uses the retained calibration data.

Re claims 9-10 & 20-21, Helterline et al discloses (column 1, lines 43-48) an ink jet printing process in which ink is ejected from nozzles using thermal energy.

Re claims 11 & 22, Helterline et al discloses (column 5, lines 15-32) a printing condition judgment by means of a simulation printout (a "calibration run").

***Response to Arguments***

3. Applicant's arguments filed 1/9/07 have been fully considered but they are not persuasive.

Applicant argues (1/9/07 Remarks: page 8, line 11 - page 9, line 6) that Applicant's claimed invention is distinct from the Helterline et al reference in that Helterline et al discloses an arrangement for adjusting ink dot size in order to maintain a

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line of dots at a constant width, whereas the claimed invention addresses the problem of correcting the density of a printed image.

However, as noted above, Helterline et al discloses (column 2, lines 14-15; column 7, lines 30-34) that the disclosed regulation of dot size serves to regulate the density of a printed image. Thus, the disclosed dot size judgment and regulation of Helterline et al is readable upon the corresponding printed image density judgment and regulation of the present invention.

#### **Conclusion**

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning the contents of this communication or earlier communications from the examiner should be directed to Stephen M. Brinich at 571-272-7430.

Any inquiry relating to the status of this application or proceeding or any inquiry of a general nature concerning application processing should be directed to the Tech Center 2600 Customer Service center at 571-272-2600 or to the USPTO Contact Center at 800-786-9199 or 703-308-4357.

The examiner can normally be reached on weekdays 7:00-4:30, alternate Fridays off.

If attempts to contact the examiner and the Customer Service Center are unsuccessful, supervisor David Moore can be contacted at 571-272-7437.

Faxes pertaining to this application should be directed to the Tech Center 2600 official fax number, which is 571-273-8300 (as of July 15, 2005).

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Hand-carried correspondence may be delivered to the  
Customer Service Window, located at the Randolph Building, 401  
Dulany Street, Alexandria, VA 22314.

Stephen M Brinich  
Examiner  
Art Unit 2624

smb *smb*  
March 7, 2007



THOMAS A. LEE  
